New Brunswick
Geographic Information Corporation
Business Plan Summary
1991-92

March, 1991

New Nouveau
Brunswick

New Brunswick Geographic Information Corporation Business Plan Summary 1991-1992

March 1991

91-05182/

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1 Introduction

This is the first business plan prepared by the New Brunswick Geographic Information Corporation. Since its formation as a crown corporation nearly two years ago, the focus of the Corporation has been on getting its board formed and learning to work as an integrated unit.

The integration job is by no means complete; however, it is time for the Corporation to begin to look forward and to chart the course which will position it as the lead agency in land information in New Brunswick, the champion for development of the private geomatics industry, and the leader of a renaissance in a reform of a two-century old system of land administration.

The Land Information Policy of the New Brunswick Government

The Corporation was established as a result of a major policy review of the collecting, storage and dissemination of geographic information.

The Corporation is charged with the responsibility for effective management of the information and to be financially self-sufficient in doing so. However, the Corporation is also responsible for a much broader mandate which is to support economic development of New Brunswick in the area of resource and environmental management and for:

> "the basic set of data for geographic information systems (which) will be a priority . . . for managing thematic data."[1]

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[1] Province of New Brunswick, Land Information Policy, March 1989.

Scope

The Corporation must continue to deliver on its established mandates and doing this fully and effectively is implicit in all its activities. Many on-going activities and projects are being carried out in working toward this goal. These activities (such as registry, assessment and control programs) consume 85 percent of the budget.

Why was this plan developed? Primarily because there are so many demands on the Corporation's resources, so many things that could be done (and need to be done). However, the reality is that there are limited resources to apply to new projects and relatively little room to manoeuvre within the operating budget, so priorities must be set to determine the best course for the Corporation to follow.

The business plan outlines how the Corporation will begin a process of profound change over the next three years. While this will only be the first part of a reform process which will take ten years to complete, it is a very significant phase of development and growth for the Corporation as it will take place in an environment which requires balancing two contrary forces: continuing government restraint versus the need to modernize the services to meet increasingly high expectations from customers, staff and from the government.

An essential element which will be introduced in the plan is a discipline of financial analysis of major projects, requiring that return on investment be a primary determinant in setting priorities. By definition, this approach will give priority to projects which generate the revenues or savings which can, in turn, be used to finance the development of other types of information which are essential to fill the resource and environmental management needs of the Province.

The plan should not be seen as etched in stone. It provides a general direction and a method for making investment decisions. However, how fast projects can be

undertaken depends on funding available and on finding co-venturers and partners and negotiating arrangements with them. In some cases, the Corporation is entirely dependent on activities beyond its control, such as changes in legislation and resistance to change by users of the information. The Corporation will need to be responsive and flexible in attacking problems while pursuing the objectives.

2 Organizational Themes

The province's Land Information Policy and subsequent policy decisions set out three broad objectives for the Corporation:

- To be financially independent
- To improve the information available for managing the province's natural resources and information services to the public;
- To develop the geomatics industry in New Brunswick.

Meeting these objectives is embodied in the following organizational themes which guide the Corporation in its activities.

Achieving Financial Independence

The Corporation must move toward a position of financial independence. Five years is considered as a realistic time frame to attain this goal.

An Information Utility for Government

The Corporation's budget is a consolidation of the budgets of the divisions which were brought together to form the Corporation.

The Act establishing the Corporation requires changing the current method of financing to one of formula funding. This approach represents a very significant and fundamental change. For, in receiving revenue which is directly tied to delivery of specific products or services, the Corporation will have to behave like a business,

meeting the needs of its customers, providing high quality services and anticipating new market needs.

In 1991/92 the Corporation will implement a formula funding approach for assessment. This revenue will be directly related to the provision of specific services.

Attaining financial independence implies that the formula revenue will be the only form of government assistance needed.

Developing the Private Geomatics Industry

The Corporation will use private sector partners or subcontractors as much as possible on its projects and development activities. Licensing or royalty fees will provide revenue to the Corporation in these cases.

Ultimately the most significant impact on the private sector will not come from contracting by the Corporation. The real growth will happen once the private sector has access to the data bases that will provide them the opportunity for value-adding and building new data products. Another way the private sector will grow is by exporting the expertise it hones as a result of implementing systems for the Corporation. For example, an automated registry index or a system linking the registry to the property maps would have application in most of the states and counties in the U.S.

Strategic Alliances

Projects such as urban mapping and maintenance of the topographic base map require a sharing of costs and/or responsibilities with government departments, municipalities and utilities. These represent opportunities to obtain good leverage from the Corporation's investments. The Corporation will form alliances, pooling resources

with those of the partners for strategically important projects. Some of the alliances anticipated include:

- Municipalities to undertake a program of urban mapping
- Resource departments to share the responsibilities and costs for maintenance of the topo data base
- A private sector firm to establish an optical scanning centre to scan registry documents
- A data centre to store and provide access to information from the real and personal property records

A Market-Driven Approach

In providing products and services, the Corporation must be responsive to the needs of the marketplace. There has been a tendency to carry out "nice to do" or curiosity-driven projects, which have been inherited by the Corporation. However, opportunities to provide services and systems which are badly needed have been neglected. The Corporation will look carefully at needs and the market potential of projects as a key decision criterion.

Need for some Quick Successes

Because the Corporation is new and highly visible, there is need to undertake some projects that will produce results in a relatively short time and capitalize on them in promotional and marketing programs. These projects will also give the Corporation an opportunity to develop project management skills.

Providing Information for Managing Resource and the Environment

Many government departments require geographic information for resource management, but do not have the budgets to develop the information. The Corporation will actively work with these departments to assist them in finding sources of funding, contributing, where possible, to the development of their projects and advocating on their behalf to ensure their priorities are recognized.

To the extent that the Corporation is successful in these efforts, the development plan may be modified to advance production of the data.

3 Current Situation Analysis

The current situation of the Corporation relative to its organizational themes is presented in the form of a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis.

3.1 Strengths

A Mandate and Organization

The Corporation embodies all the major components of a land information system. This provides an unprecedented opportunity to integrate the services and data bases and to set priorities to advance the overall objectives envisioned by Government. Crown corporation status gives much more flexibility to implement the aims of the organization than has been possible within the framework of government departments.

A High Profile

Politicians and the private sector want the Corporation to succeed and expect it to be an instrument of change and modernization. The Corporation should be able to use this position to its advantage in "promoting" new ideas and projects, and to have the support of the key interest groups in implementing change.

An Extensive Network of Public Access Points

While previously the public and other users dealt with a Land Information Centre, a County Registry, or an office of the Assessment Branch, now there is an opportunity to serve the public with a full array of services and products at all of the above locations. With appropriate cross-training, staff can provide the public with a much more comprehensive service than has previously been available.

Good Rapport with Potential Partners

Increasingly, it will be vital that the Corporation work with its partners to build the systems and create the needed data bases. Over time, the individual operating divisions of the Corporation have established good working relationships with some of these partners. They also see the benefits of a close working relationship, and recognize the need to coordinate activity and to carry out projects which respect provincial standards.

3.2 Weaknesses

Technology Needs Updating

The Corporation is woefully out of date in its technology. It has inherited systems and hardware which do not correspond to the needs of an efficiently run operation. There is a lot of work to be done simply to bring existing automated and semi-automated systems up to modern standards, let alone making any improvements to the antiquated systems and methods in use around the Corporation. While some of the projects identified in this plan will help to alleviate the problems, the Corporation will also be undertaking a comprehensive Information Technology Strategy this year to map out its course for introducing appropriate technology into operations.

Lack of Data Bases

The Corporation has many kinds of data in a variety of files and formats, but there is only one completely automated data base (PATS) which has potential commercial value. Data bases are critical building blocks for the Corporation, particularly for enabling it to become a provider and broker of information. Property map information needs to be converted to digital form so it can be accessed by more users, the topo base mapping program needs to be completed so that there is a full coverage of the province. Historically, individual branches and departments invested time and

effort on pilot, experimental and band-aid projects. There was never a mandate to look at the problems systematically or with the broad strategic focus required now that there is a single corporation overseeing the entire system.

No Project Management Bench Strength

Change requires leaders who know how to manage large, multi-dimensional projects. At senior levels of the organization, there is good experience in project management. However, the Corporation does not have enough project management expertise at the middle management level. The Corporation merged three relatively mature organizations with good administrative skills, but limited experience in project management. There will be a need for two or three good project managers.

The Organization is not working as a Cohesive Unit

The nature of the work of the disparate parts of the Corporation and the physical separation of the offices has not led to a sense of commonness of purpose among staff. There will need to be continued emphasis on the operations and a centralization of the key management staff. Establishing the strategic focus for the new projects and communicating and concentrating on the priorities for development are important as much for the "esprit de corps" of the staff as for improving the information of the Corporation.

Another reason for the lack of solidarity is that staff and the outside world have the sense that "nothing is getting done". The reality of the past few years is that the problems have been known but the old organizations have not been able to move to resolve them. This has begun to change with the new administration, but a legacy of inaction must be overcome and this will take time. The Corporation must fix on the key problem areas and keep focused until they are resolved.

Lack of Market Research

Although the elements of the Corporation have been involved for years in providing information to many different types of customers, there has never been any market research into the needs of the customers. The decision to introduce new products or services has generally been based on the interests of the staff or intuitive feelings about the needs.

The Corporation serves four market segments:

- Consumers/General public
- Commercial Users (lawyers, realtors, etc.)
- Geomatics Industry/Value adders
- Co-venturers (government departments, municipalities and utilities)

Market research is needed in all these segments.

3.3 Opportunities

Market Opportunities

There are numerous opportunities to sell the products of the Corporation, and to develop new services which will have market potential. Some examples of marketable products include:

- Information from the PATS system
- Digital property map information
- A parcel index
- The registry day book
- Paper map products, notably an update of the Province's old "Yellow Map Book"

In addition, there are opportunities to extend the current services to make them more appealing to customers. For example, with appropriate legislation and automation, the personal property registry would allow financial institutions to register documents for longer periods than the three years they are now limited to, they would be able to register documents in a province-wide registry as opposed to a county registry, and would have on-line access to data bases.

Opportunities for the Geomatics Industry

The private sector has numerous opportunities to benefit from the Corporation's activities, and the Corporation will be sensitive to optimizing the industrial benefits. Among the potential opportunities are the following:

- Digitizing property maps
- Providing the data centre function for the Corporation
- System design and development
- Contracting out assessment services
- Value adding to the registry data bases
- Maintenance of the survey control network
- Value adding to the digital topographic base
- Value adding to the digital property base
- Maintenance of the digital topograhic base.

Opportunities to Streamline Operations

The integration of the three operational branches of the Corporation will present opportunities to co-locate activities, review staffing and automate some services. This should increase the efficiency of operations and allow the Corporation to free up resources to reallocate to higher priority activities and projects.

Fees and Other Revenues

Fees and other charges are presently below the equivalent rates in other jurisdictions, and do not reflect the true value to the users. Fees and other charges should be increased to bring them in line with other provinces as a means to reduce the financial dependence on government.

3.4 Threats

Continued Budgetary Constraint

For the foreseeable future, the Corporation will be working in an environment of tight government budgeting. The Corporation cannot count on the government to provide new funding, whether for operations or for worthy new projects. The one exception may be situations that demonstrate a return on investment to the Province.

"Working in a Fishbowl"

The Corporation has had a slow, and to some, disappointing start. Expectations were high for the Corporation to begin making changes, but there has been little progress evident. This business plan is designed to begin the process of change which is required to turn the Corporation into a modern operation. The cost of failure will be high. This suggests that projects will need to be carefully planned and solidly executed.

Customers are Used to Getting Data Free

Financial independence requires that the Corporation obtains realistic fees for the services provided. Traditionally, government departments and municipalities have received the data free. They have not budgeted for the costs of getting data.

Therefore, the Corporation will need to work closely with them to find solutions which they can live with.

Skepticism in the Legal Community

Government has made a commitment to improve the registry. Lawyers and others who are regular users are sceptical about seeing this happen, and there is some apprehension about the effect of any major change in the way things have been done for years. Some resistance can be anticipated, but how seriously this will affect implementation is not known. The Corporation is attempting to mitigate this barrier as much as possible by recruiting a senior lawyer to join the organization at the vice presidential level, and will need to mount strong promotional efforts in support of the projects.

3.5 Strategic Issues Matrix

The exhibit on the following page brings together the SWOT analysis in the form of a matrix which describes the actions and tactics for the Corporation in implementing its strategic direction.

Exhibit 3-1 - Strategic Issues Matrix

STRATEGIC ISSUES MATRIX

		OPPORTUNITIES	THREATS
		• Numerous good potential market opportunities • Opportunities for the Geomatics industry • Opportunities to streamline from integration of operations • Fees and other revenues	• Continued budgetary constraint • "Working in a fishbowl" - high expectations • Customers are used to getting data free - they need to be re-educated • Skepticism in the legal community
STRENGTHS	• A mandate and organization • A high profile • Extensive network of public access points • Good rapport with potential partners	• Develop projects to capitalize on opportunities • Develop networks of partners for development • Build to meet mandated and market needs	• Optimal use of other sources of funds • Get max. return from projects • Focus on operational efficiency • Quick success project • Increase fees and charges
WEAKNESSES	• Technology needs updating • Lack of data bases • No project management bench strength • Organization is still not working as a cohesive unit • Lack of market research - Understanding of market demand and segments is weak	• Strengthen Project Management Skills • Better market research • Create a focal point for industry development	• Work with government to solidify revenue base • Education of customers • "Bottom Line" focus for investment decisions

4 General Strategy and Objectives

The medium (3 year) and long (5-10 year) term objectives and general strategy for the Corporation follow from the themes and strategic analysis.

4.1 General Strategy of the Corporation

The general strategy will be to commercialize those products and services which will yield sufficient returns to enable the Corporation to carry out a series of development projects leading to a more responsive and efficient operation. The Corporation will maximize leverage from development resources by participating as a partner on projects, and, wherever practical, by tendering projects to the private sector and redirecting development resources to priority projects.

4.2 Three-Year Objectives

Within the next three years, the Corporation's objectives are:

1. To have the topological base map completed by 1993

2. To begin updating the base map on a regular cycle by 1993

3. To implement an on-line personal property registry system by 1992

4. To commercialize the PATS system by 1992.

5. To conduct market studies of other Corporation information and systems which can generate financial returns and contribute to the overall development of the Corporation

6. To digitize the property maps by 1994.

7. To produce paper map products (atlas, road maps, etc.) for consumer use

8. To develop an automated parcel index by 1993.

4.3 Long Term Objectives

The long term objectives of the Corporation are:

1. To be self-sufficient within five years.

2. To modernize the real property registry system

3. To map the coastal zones and urban areas of the Province at scales suitable for planning and information recording by major users.

5. To be solidly positioned and recognized by four key market segments (Co-venturers, Geomatics Industry, Commercial Users and Consumers).

5 Current Development Activities

The current project development activities of the Corporation are categorized into four groups: strategic projects; research projects; interim projects and organizational projects.

5.1 Strategic Projects

Strategic on-going projects are those which represent an important long term strategic thrust for the Corporation, and include the following:

Cooperative Efforts with the Federal Government

Structuring 1:250,000

- Enhancement of the 1:250,000 scale maps of the whole province to improve the quality
- Project contracted to the private sector

Structuring 1:50,000

- Enhancement of the 1:50,000 series base maps
- This map series represents a valuable basis for value-adding and planning
- Negotiations with federal government are in progress.

Cooperative Efforts with Other Government Agencies

These include cooperative projects with other provincial government departments, crown corporations and utilities. These efforts are designed to ensure that provincial standards are adhered to and to provide technical assistance as it is required. Current

examples of such projects are watershed mapping and the Gulf of Maine initiative with the Department of the Environment.

Cooperative Efforts with the Private Sector

The focus is to facilitate utilization of standards and to try to streamline efforts and eliminate unnecessary duplication of effort.

Other Strategic Projects

Other on-going strategic project include:

Standards

- An on-going project to set standards for land information

Strategic Information Plan

- The identification of the data and information technology requirements of the Corporation, and the establishment of a strategy to get the Corporation to where it needs to be.

5.2 Research Projects

Research projects are being done collaboratively with the Federal Government, other provincial departments, municipalities and the private sector.

Research Projects with the Federal Government

Two on-going projects with Statistics Canada are being conducted to eliminate the duplication of effort in data collection.

Another cooperative effort involves the establishment, by Energy, Mines and Resources, of a Remote Sensing Centre for the Province. The main role of the Centre will be to demonstrate remote sensing applications in the Province. EMR will provide an experienced staff person and the Corporation will provide space and equipment to support the specialist.

Research Projects with Other Government Agencies

These projects primarily involve technical assistance to line departments, municipal governments or government agencies. In some instances the Corporation's involvement may also include developing a pilot system.

Currently, the Corporation is participating on two such projects - one with the City of Moncton; the other with the City of Fredericton.

Research Projects for Private Sector Development

These projects are designed to enhance the development of private sector companies, products and services. The Corporation assists by providing such services as evaluating products and performing benchmarks for sales to clients. As well, the Corporation can provide sample data to enable testing of new products and approaches.

In addition to these types of activities, the Corporation is also involved in the sponsoring of particular projects. Currently, this includes the Electronic Image Management System (EIMS) project. This project has pilot tested a system of scanning, storing and retrieving documents and developed costs for the implementation of such a system in all the registries.

5.3 Interim Projects

Interim Projects involve upgrading and maintenance of existing information systems to meet the operating needs of the Corporation. This work is to maintain current systems until appropriate new systems are developed. These interim information systems projects include the following:

- Property Parcel Index
- Corporate Securities Registry
- Land Titles Registry
- Consolidated Index for Land Registry.

5.4 Organizational Projects

Organizational Projects are designed to improve the management of the Corporation. These projects include:

- Developing and implementing an accounting system for the registries;
- Reviewing and upgrading the human resource system;
- Planning and implementing office automation and a network;
- Upgrading the Corporation's computer hardware.

6 Strategic Project Priorities for Future Development

More than thirty new project opportunities have been identified by the Corporation. The following nine strategic projects represent the highest priorities.

Before projects are undertaken, a detailed assessment of investment requirements and costs will be conducted.

The projects are listed in order of priority as ranked by senior staff.

Personal Property Registry Modernization

- Under current legislation, document handling and storage is required. The revisions which are being considered would make New Brunswick's personal property registration consistent with that of other regions in Canada. These regions utilize a notification system and there is no need to handle or store the security documents;
- On-line document searching from remote locations will be available to clients;
- Ultimately users of the system may be able to register documents from their own offices;
- A service bureau may be used to handle the systems requirements;
- An early decision whether or not to proceed with a Personal Property Security Act is required from government to establish the type of information to be maintained. The current document based approach is quite different from a notice based approach;
- The need for this project arises from several sources: the demand by financial institutions and credit bureaus to be able to access information more readily; the desire for modern personal property legislation consistent with other jurisdictions; and the need to enhance the efficiency of the registry process.

Property Map Digitization

- Three year project to digitize property maps for all of the properties in the province;
- The need for this project relates to the growing proliferation of geographic information systems among utilities, municipalities, planning commissions and government departments and their need for data for their systems.
- Requires the digitization of about 450,000 properties;
- Digitization activities will be contracted out while maintenance will be included in the regular activities of the Corporation;
- Links to the attribute data in the parcel index system (real property registry) will be made when that index is upgraded.

PATS (Property Assessment and Taxation System)

- Project to broaden the accessibility of the PATS database in an on-line mode;
- The information contained in PATS is very saleable and offers good revenue generating potential for the Corporation. The need for this project relates to improving the efficiency of Corporate operations which now handle third party requests;
- Commercialization will begin based on the data that is now considered public;
- Confidentiality policy related to the amount of information that can be publicly available must be clarified;
- A service bureau could be used to handle the systems requirements.

Paper Map Products

- Project will initially involve the publication of a "book of maps". Future products will be undertaken based on the identification of opportunities from market research;
- Paper map products will be produced and distributed through the Corporation's outlets and potentially other distribution channels. Schools are expected to be a major market;
- The initial investment depends on the product to be produced, the quality and the availability of existing maps. Product feasibility will be assessed on an individual basis;
- These products are part of a public awareness program for the Corporation.

Real Property Registry Modernization

- This project is a major undertaking requiring up to seven years to complete the system design, development and implementation as well as the scanning of documents;
- An automated registry with electronic storage of documents eliminates the need for on-site storage of documents;
- The first step is to design and develop an indexing system based on parcel, grantor and grantee information;
- Full system development, digitization and implementation will follow in subsequent years;
- This project is needed to improve the service that is offered by the registries, to improve the efficiency of the registries and to avoid future expansion of premises and staff to accommodate increasing volumes of documents;
- Need to seek clarification of policy regarding land titles.

Topographic Base Map Maintenance

- This project involves the maintenance of the topographic base maps for the province;
- The need for this project arises out of the need for up to date data for government departments and other base map users;
- Partnering with government departments such as the Department of Natural Resources and the Department of Transportation will be necessary to reduce the cost of maintenance and focus maintenance efforts on areas of change;
- The objective is to update topographic base maps on a regular cycle.

Urban Mapping

- This project involves the creation of digital base maps at appropriate scale for the urban areas of the province;
- Municipalities are likely partners to share in the cost of this project;
- Activity will not be undertaken without the sponsorship of partners to share the cost;
- The need for this project relates to the needs of municipalities for data to plan essential services and better develop the areas they manage.

Coastal Mapping

- This project involves mapping of coastal areas of the province and is considered to be a logical extension to the current base mapping project;
- The data created in this project is not thought to be readily saleable;
- Specific funding, sufficient to cover the costs of undertaking this project will have to be provided to conduct this project;
- The need for this project relates to both environmental concerns and resource management and is considered crucial to the environmental monitoring and protection of the province's coastal zones.

Facility Improvements

- This in an on-going project to upgrade the space occupied by the Corporation;
- The need is to upgrade the Corporation's facilities to provide an efficient work environment for customers and staff.

6.1 Assessment of Projects

Initial priorization of the strategic projects is based on three factors: the estimated rate of return, the size of investment required and the relative priority of the project as ranked by senior staff.

The most profitable projects are needed to finance less profitable projects, or those which require such large investments.

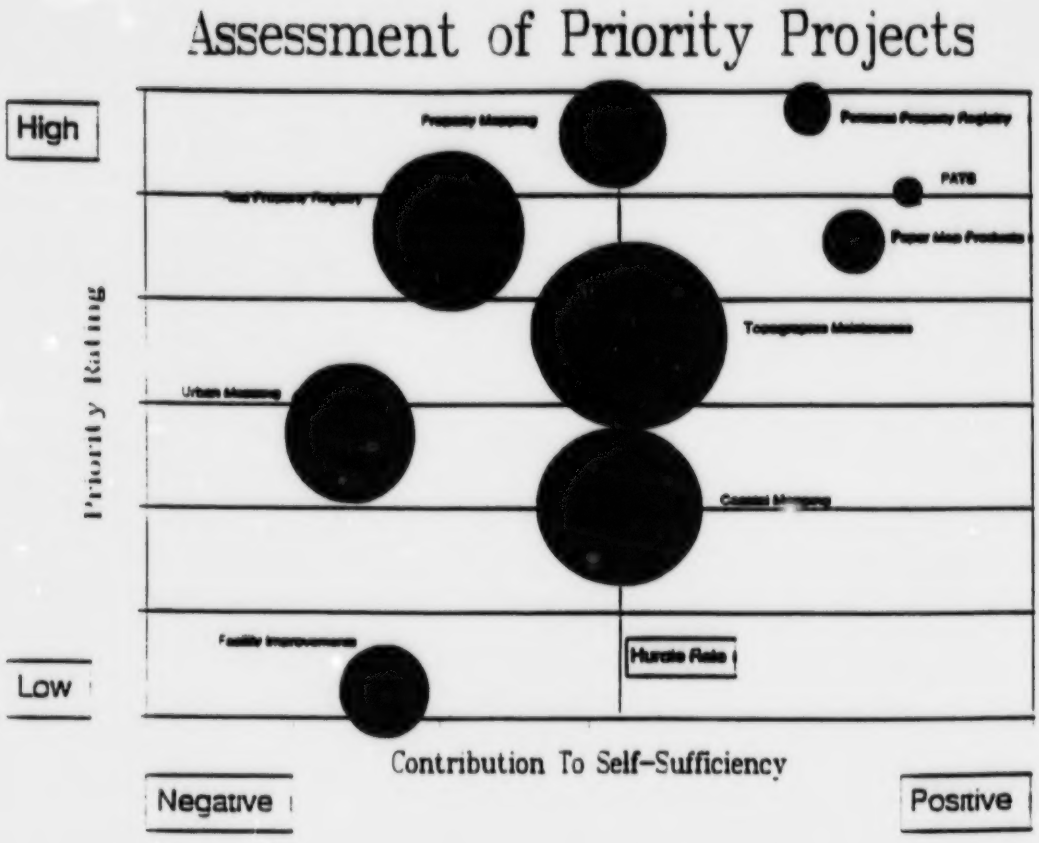
Exhibit 6-1 shows the relative rankings of each of the nine projects. The size of the circle is proportional to the total investment. The position of the circle (left to right) indicates the profitability of the project and the position of the circle up and down represents its relative priority.

The "hurdle rate" is defined as 12%, which the Corporation has used as the required rate of return for each project. This rate is the long term bond rate for the province of New Brunswick.

The hurdle rate is indicated by a vertical line on the graph. Projects that fall on or to the right of this line contribute toward the goal of self-sufficiency, those to the left of the line have a negative impact on self-sufficiency.

Each of the projects vary in terms of profitability, priority and size of investment.

Exhibit 6-1 - Financial Assessment of Projects



Profitability

- The PATS project has the highest profitability followed by the paper map products and personal property registry projects. All of these projects are profitable ventures for the Corporation due to the low investment and high expected revenues. The property mapping project is also profitable. The Coastal mapping and topo base map maintenance projects earn the required rate of return only if it is assumed they are funded by a continuation of the current government funding for resource mapping projects. The balance of the projects do not earn the required rate of return. The facility improvements and urban mapping projects represent costs to the Corporation without corresponding revenues. The real property registry (No. 6) does yield a return in the form of cost-avoidance. However, for the time frame under consideration the return does not exceed the hurdle rate nor repay the original investment.

Priority

- According to staff rankings, the highest priorities were property mapping, property registry, PATS, paper map products and real property registry projects.

Size of Investment

- The PATS project requires the smallest initial investment followed by paper map products and personal property registry. All other projects require a total investment of several million dollars each.

PATS, paper map products, and the personal property registry are the most financially attractive projects. All require relatively small total investments, appear very profitable and can be undertaken quickly. These projects will generate a substantial amount of revenue which will be used to finance the development of some of the other strategic projects.

7 The Financial Self-Sufficiency Plan

One of the objectives of the Corporation is to become financially self-sufficient within five years. Exhibit 7-1 compares current sources of funding with those anticipated for the 1996-97 fiscal year. This exhibit illustrates how the strategy for moving to self-sufficiency will affect the Corporation's sources of funding.

From the two charts it is evident that the Corporation must develop revenue from sales of products and services. The strategic projects provide the potential for this.

7.1 Financial Impact of Strategic Projects

The Corporation's highest development priorities are:

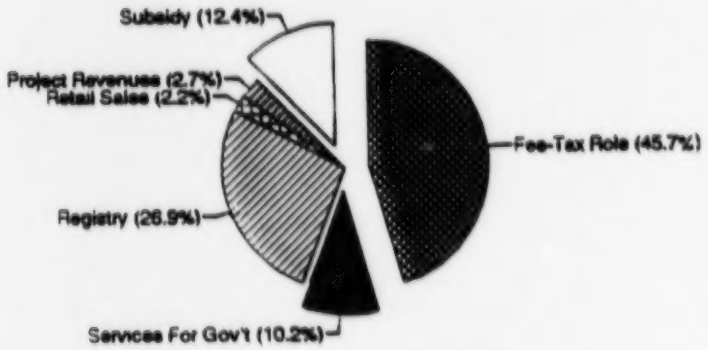
- PATS
- Personal Property and
- Paper map products.

These form the core of the investment strategy for the next three years. Depending on the total government grant revenue available to the Corporation, other projects could be undertaken or initiated, but effort will be concentrated on the three core projects.

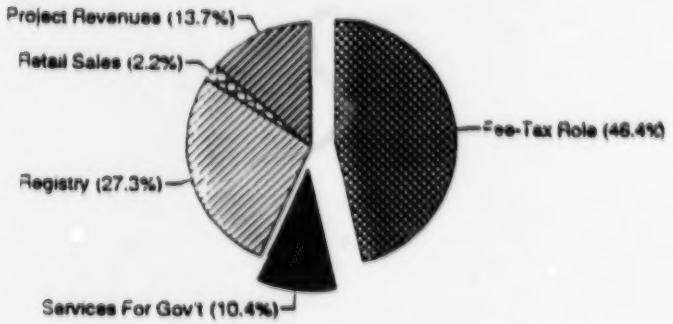
The financing of new projects will come from government subsidies to the Corporation, since government effectively is acting as the Corporation's bank at the initial stages. An objective of the Corporation is to reduce the amount of subsidy from government as project revenues increase. To do this the Corporation will undertake development projects which will allow the Corporation to create alternate

Exhibit 7-1 - Current and Future Sources of Funding

Current Sources of Revenues
1991-92 Budget Request



Future Sources of Revenues
1996-97 Proforma Operating Statement



sources of revenue and provide needed services. The subsidy is revenue the Corporation receives from government other than for the services provided directly to government (i.e. generating the tax role; undertaking resource mapping; and maintaining the survey control network).

Initially, project expenditures will exceed revenues. This situation is reversed as of 1996-97. The project development schedule will be structured to reduce the Corporation's dependence on grant/subsidy revenue from government and enhance financial self-sufficiency.

7.2 Financial Projections

This section presents the financial projection for all operations of the Corporation, including new projects.

- Exhibit 7-2 presents a ten-year proforma operating statement. The 1991-92 subsidy is estimated to be $2.3 million. This subsidy is reduced in subsequent years until 1996-97 when no further subsidy is required.

- Exhibit 7-3 shows the total revenues received from government.

- Exhibit 7-4 shows total revenues by source.

7.3 Funding and Revenue Generation

Moving toward financial independence will require more partnerships and use of other non-traditional sources of funds. The following is a description of some of these revenue sources and their impact on funding.

Exhibit 7-2 - Ten Year Proforma Operating Statement

January, 1991

($ 000's - Constant 1991)

	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01
Revenues										
Fee For Tax Role	8500	8500	8500	8500	8500	8500	8500	8500	8500	8500
Services For Gov't	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Registry	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Retail Sales	400	400	400	400	400	400	400	400	400	400
Project Revenues	500	1300	2000	2400	2500	2500	2500	2500	2500	2500
Subsidy	2300	1800	1600	900	500					
Total Revenues	18600	18900	19400	19100	18800	18300	18300	18300	18300	18300
Expenses										
Assessment	7800	7800	7800	7800	7800	7800	7800	7800	7800	7800
Registry	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
Retail Sales	300	300	300	300	300	300	300	300	300	300
Planning and Systems	700	700	700	700	700	700	700	700	700	700
Administration	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Geomatics Secretariat	200	200	200	200	200	200	200	200	200	200
Amherst Subsidy	300	200	100							
Project Expenditures	2900	4300	4850	4250	3950	2300	2300	1800	1800	1800
Total Expenses	18000	19300	19750	19050	18750	17100	17100	16600	16600	16600
Position At Year End	600	-400	-350	50	50	1200	1200	1700	1700	1700

NOTE: The dollars shown above are estimates as of January, 1991.

Exhibit 7-3 - Total Revenues Received From Government

Total Revenues From Government
(Constant 1991 Dollars)

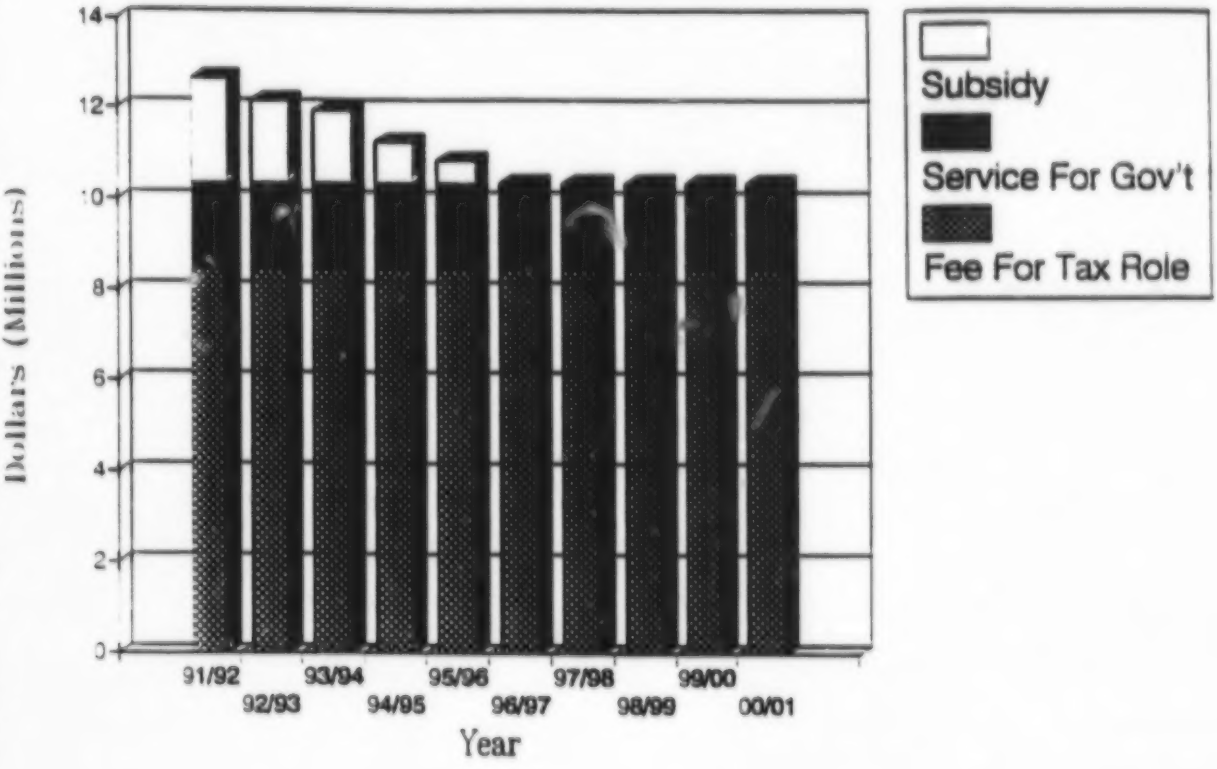
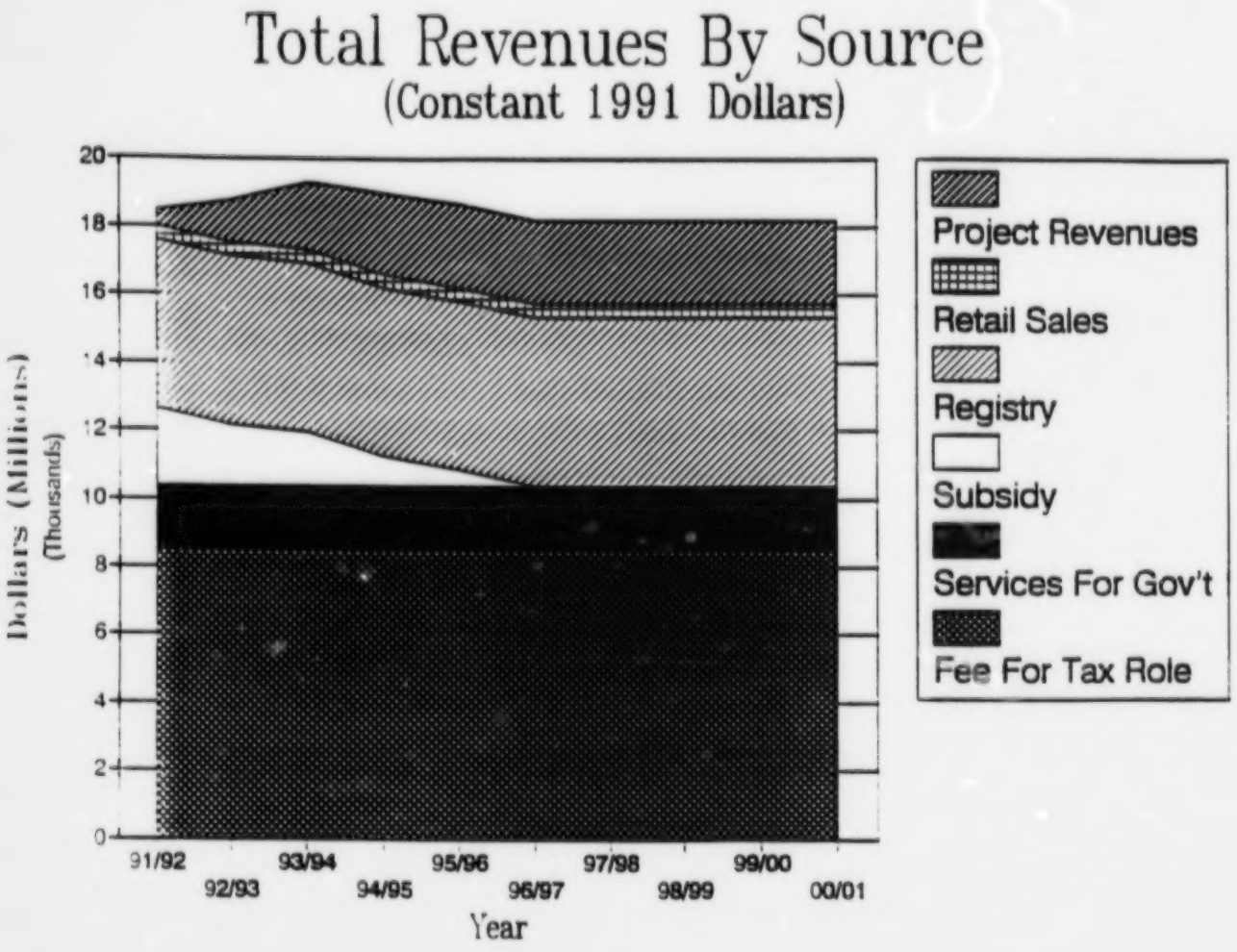


Exhibit 7-4 - Total Revenues by Source



Direct Government Funding

This type of funding has been the traditional source of funding for both operations and development activity. A lump sum grant has been provided by the provincial government to cover operational and development costs. Government is the Corporation's largest client and will continue to be.

Currently, activities such as property assessment, base mapping and services to Government are all funded by a direct grant from the Provincial Government. This approach will change such that funding is provided more on a fee for service basis.

Providing geographic information is, for the most part, not a profit generating activity. Projects such as topographic base mapping, coastal mapping and urban mapping offer little in terms of financial rewards to the Corporation. It will need to be recognized that these activities, while a major part of the Corporations mandate, offer few tangible benefits for the Corporation. These activities are done primarily for the benefit of resource departments, municipalities and the private sector. To the extent that government policy dictates that such projects are necessary, the Corporation will need government assistance, on a fee-for service basis to undertake them. It should be noted, however, that there will be savings to government by avoiding the cost of various departments completing segments of this work independently in an uncoordinated manner.

Such projects are key to meeting the mandate as it relates to providing information for resource management. In addition, these projects are building blocks from an economic development perspective.

Products/Services Sales

As previously mentioned, government funding will evolve into fees for services. This represents only one source of products/services sales revenue. Revenues from business and the general public are the other main sources. In the future, sales of information will be a much more important source of new funding for the Corporation. Some of these information products can be sold directly by the Corporation while others will be sold through joint ventures and other such arrangements. The most appropriate means of bringing products to market will depend on the particular product. Presently, products such as PATS (property assessment and tax system), the personal property registry, property mapping and paper maps are all products or services that appear to be saleable directly through the Corporation.

Royalties and Licensing Fees

In some instances it will be desirable to have a company other than the Corporation act as an agent for the delivery of products and services. There may even be several companies competing for the same market. To compensate the Corporation for the use of its data, royalty arrangements and licensing fees will be established. The terms will vary according to the project; however, the goal in all cases will be to foster economic development and generate a fair return for the Corporation.

Development Agency Funding

Funding sources such as the Atlantic Canada Opportunities Agency as well as federal/provincial agreements will be utilized in conjunction with private sector partners and co-enturers to leverage the Corporations funding contributions. The main benefit of this approach is the tremendous leverage which it can give to the Corporation to get things done.

An interesting potential source of assistance is the proposed Atlantic Geofund which is being considered by ACOA. If this project comes to fruition, it will provide several million dollars for projects in the Atlantic region which develop the private sector's capabilities to export geomatics work. This is an example of the type of project where the Corporation, in association with a private sector partner, could get some of the important development projects undertaken with relatively small commitments of its own funds.

Development agencies such as ACOA are particularly interested in assisting activities which have good potential for enhancing economic development. The coastal mapping and urban mapping projects do not by themselves represent economically viable projects. These projects do present good opportunities to develop the private sector. The undertaking of these projects will develop an expertise that is expected to be valuable from an export perspective.

In addition, once completed these projects will make available a new and comprehensive source of data that enables the growth of service companies involved in planning, resource management, environmental management, software application development and other related fields.

The opportunities related to these two projects may make it possible to attract funding from ACOA, thereby accelerating the undertaking of these projects and the resultant economic benefits.

Exporting Services

After the Corporation has undertaken a number of project development activities, the Province will have a body of knowledge and expertise that can be exported. Mostly, this will be an opportunity for the private sector, but there should also be opportunities for the Corporation to contract staff to these partners. In some cases,

there may be opportunities to carry out small consulting contracts for other jurisdictions in areas where the Corporation has developed an expertise.

There may even be a modest local market assisting line departments in setting up geographic information systems.

Joint Ventures, Alliances, etc.

Where necessary the Corporation will form joint ventures and other types of alliances so that projects can get underway or be expedited. These partnerships will reduce the Corporation's investment requirements and establish working relationships with major partners such as utility companies, municipalities or government departments.

8 Legislative Program

The Corporation is responsible for the administration of fifteen acts and for sections of two additional acts. This would be a very large and complex portfolio for a department, let alone a crown corporation.

Much of the legislation was developed before the technological changes that have revolutionized administrative practices in the last ten years. Consequently, many of the acts require review and updating.

In some cases, legislative change is required in order to fully implement the priority projects.

8.1 Personal Property Legislation

It is generally recognized that the personal property legislation is obsolete and inconsistent with legislation in other provinces. The Department of Justice is completing a review of this legislation. Timely acceptance of changes will provide the opportunity to incorporate them into automation in the registries. There are several different forms the legislation could take, and the final decision will be a government policy. The Corporation can proceed to build a system in the absence of a final decision and build in the options to accommodate whatever type of legislation is eventually passed. However, such an approach will add to system costs.

8.2 Clarification of Confidentiality Issues

While not technically a legislation issue, clarification is needed from Cabinet with respect to what information from PATS can be made public. PATS's greatest value is as a complete data base of information on each property in the Province. There are some elements which should clearly be kept confidential (e.g. information on the

interior condition and amenities). However, it is the practice in other provinces to make most of the information public and this information is considered marketable. The most frequently requested information is the sale price on transfer of a property.

This policy clarification would be consistent with the Land Information Policy of the government, which states:

> "Except as otherwise restricted by legislation or privacy requirements, all land related information collected and stored by departments and agencies of government shall be made available to any who request it, at a cost related to such provision."

8.3 Real Property Legislation

There are both administrative and policy issues which need to be clarified before significant progress can be achieved on projects relating to automating the real property registry. For example, the corporation should be moving toward a means of digital storage of documents to cut down on the physical space needed and to protect the documents from deterioration. Also, while the Corporation has a sense of how the registry reform process should take place (more of an administrative change than a wholesale revamping of the current method), there is a great deal of consultation which must take place with legislators and the legal profession before beginning the process of change. Management believes that it can develop a system to accommodate most eventualities and that some of the fundamental decisions are not needed to get on with the job. However, some changes are needed to accommodate technological enhancements even though these may not represent significant changes in the basic registry system.

8.4 Surveys Act

Presently, all survey information must be submitted in paper format.

Changes to surveying legislation are needed in order to build and maintain a province-wide cadastral mapping base. From this perspective the issues that need to be addressed include:

(a) ensuring that all cadastral surveys which lead to a change in boundaries are coordinated;

(b) ensuring that such surveys adhere to certain standards;

(c) allowing (and eventually requiring) that such surveys be submitted in electronic form.

To meet these requirements changes may be required in the Surveys, Community Planning, Registry and other provincial statutes. It may also require changes in the bylaws of the A.N.B.L.S.

One specific question which will need to be addressed is whether the integrated survey area concept (currently applicable only in Saint John County) should be extended throughout the province.

9 Geomatics Industry Development

The strategy outlined in previous sections of the business plan will result in (in fact, has been designed to), produce opportunities for the private sector. However, the Corporation will also need to take a proactive approach to the private sector.

The Corporation will work closely with the Department of Commerce and Technology in industry development, as well as with the Geomatics Secretariat, the Champlain Institute and other groups or organizations. Corporation staff will identify opportunities for the private sector, become familiar with the full range of services and firms available in geomatics, "package" requests for proposals so that New Brunswick industry can respond and identify potential partners for strategic alliances and other partnership opportunities.

Each major project will be designed to provide the optimal benefit to industry while providing an acceptable financial return to the Corporation.

10 Marketing Plan

At present, the Corporation does not have any marketing strategy. It seems clear also that it has no established position in many of the markets served. However, the general strategy being proposed requires that the Corporation develop an image which reflects the desired position within each of the market segments. Market research will be carried out this year to develop a marketing strategy to enhance the Corporation's position and determine the needs of each market segment. As well, similar research will be done for the major projects which will start this year, to ensure that their design meets the needs of the markets they are being designed for.

Other marketing activities planned for this year include:

- A signage program for all Corporation offices
- Changing the LRIS logo to the Corporstion logo on all materials provided to customers
- A review of the physical location of Corporation premises. Plans will be developed for relocating offices, as leases expire, to locations which offer good visibility for the Corporation and provide good access for customers.